

REMARKS

Claims 1 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Caretta et al. (U.S. Patent No. 6,409,959) taken in view of Kaido et al. (U.S. Patent No. 6,136,123) and at least one of Hashimura et al. (U.S. Publication No. 2002/0033557) and Applicant's Admitted Prior Art (AAPA). In response, Applicant amended claim 1 to clarify that the tire building drum is heated to a maximum temperature of 40°C to 60°C in the step of heating the tire building drum, and that the uncured tire components are attached to the innerliner by placing the adhesive in a high tackiness condition through the heating of the adhesive, and respectfully traverses the rejection.

Claim 1 now clarifies that the surface of the tire building drum is heating at a maximum temperature of 40°C to 60°C in the step of heating the tire building drum. With respect to the heating step, the Examiner reasserts arguments in the previous rejection and states that col. 6, line 15-24 of Caretta teach prevulcanization of the primer before the tire is introduced into the mold. However, the prevulcanization occurs at a temperature between 80°C and 150°C. Since claim 1 now clarifies that the maximum temperature of heating the tire drum is between 40°C to 60°C, Applicant respectfully traverses the rejection of claims 1 and 5 because Caretta does not teach a maximum temperature in the recited range.

A feature of the present invention is to allow for easy handling of the innerliner which has an adhesive applied to an outer peripheral surface and to prevent the innerliner from being separated from other tire components by adhering the innerliner to

the tire components with an adhesive that is high in cohesion. In order to allow for easy handling of the innerliner to which the adhesive has been applied, it is necessary to use an adhesive that is high in cohesion and low in tackiness at room temperature. In such an adhesive, when adhering components, tackiness is insufficient, and therefore, according to the present invention, tackiness is enhanced by heating the adhesive to a temperature in the range of 20°C to 30°C. The present invention heats the adhesive for this reason, and not in order to expedite an evaporation of the solvent contained in the adhesive.

With respect to the Kaido, Hashimura, and the AAPA, none of these references discloses the steps of amended claim 1, wherein the surface of the tire building drum is heated to a maximum temperature of 40°C to 60°C, and wherein the uncured tire components are attached to the innerliner by placing the adhesive in a high tackiness condition through the heating of the adhesive. Accordingly, any combination of Caretta in combination with Kaido and at least one of Hashimura and the AAPA fails to disclose or suggest the above-described features. For this reason, withdrawal of the §103(a) rejection of claims 1 and 5 is respectfully requested.

Claims 1 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable Hashimura taken in view of Caretta and Kaido. Applicant respectfully traverses the rejection for the reasons recited above.

The deficiencies of Hashimura, Caretta, and Kaido are noted above. On page 3 of the outstanding Office Action, the Examiner asserts that preheating of the building drum is to promote evaporation of the solvent, wherein Hashimura has a preferred range of 40-80°C during the heating step. However, Hashimura fails to disclose

or suggest the building drum being heated to a maximum temperature of 40°C to 60°C, as now recited in amended claim 1. Moreover, the combination of references fail to disclose or suggest that the uncured tire components are attached to the innerliner by placing the adhesive in a high tackiness condition through the heating step of the adhesive. Applicant respectfully submits that the Examiner is using impermissible hindsight to achieve the range taught by Applicant. Hashimura merely teaches that the temperature of the surface of the molding batter in a subsequent step after forming the green tire is in the range of 40°C to 80°C. The Examiner is using hindsight to assert that it would be obvious to apply this temperature range to an earlier heating step. Nevertheless, assuming *arguendo* that the earlier heating step could be in this range, Applicant respectfully submits that Hashimura does not disclose or suggest a maximum temperature of 40°C to 60°C, as now recited in amended claim 1. For this reason, withdrawal of the §103(a) rejection of claims 1 and 5 is respectfully requested.

Claims 2 and 12-13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hashimura in view of Caretta and Kaido, and further in view of Irie (U.S. Patent No. 4,468,267). Applicant traverses the rejection for the reasons recited above with respect to the rejection of independent claim 1.

The deficiencies of Hashimura, Caretta and Kaido are noted above. Irie is merely cited for teaching a two stage process in which the carcass is formed on one drum in a first stage in toroidally shaped assembly with the previously prepared belt/tread. However, Irie fails to disclose or suggest the features of amended claim 1, wherein the maximum heating temperature of the tire building drum is between 40°C and 60°C, or the

feature of the uncured tire components being attached to the innerliner by placing the adhesive in a high tackiness condition through the heating. For these reasons, withdrawal of the §103(a) rejection of claims 2 and 12-13 is respectfully requested.

New claim 14 is added and further clarifies that the green tire is not prevulcanized when the tire building drum is heated to the maximum temperature of 40°C to 60°C. New claim 14 clarifies that no prevulcanization occurs, unlike Caretta. Applicant earnestly solicits allowance of new claim 14 based on the features recited in this claim, and also for the reasons recited above with respect to the rejection of independent claim 1.

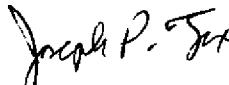
For all of the foregoing reasons, Applicant submits that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

If a Petition under 37 C.F.R. §1.136(a) for an extension of time for response is required to make the attached response timely, it is hereby petitioned under 37 C.F.R. §1.136(a) for an extension of time for response in the above-identified application for the period required to make the attached response timely. The Commissioner is hereby authorized to charge any additional fees which may be required to this Application under 37 C.F.R. §§1.16-1.17, or credit any overpayment, to Deposit Account No. 07-2069.

Respectfully submitted,

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